

Having described the invention, the following is claimed:

1. A vehicle occupant safety apparatus comprising:

an inflatable vehicle occupant protection device for, when inflated, helping to protect an occupant of a vehicle;

at least one tether for helping to control the shape of said inflatable vehicle occupant protection device when said inflatable vehicle occupant protection device is inflating;

an inflation fluid source having two modes of operation,

in the first mode of operation, said inflation fluid source is activated to provide a first inflation fluid pressure in said inflatable vehicle occupant protection device,

in the second mode of operation, said inflation fluid source is activated to provide a second inflation fluid pressure in said inflatable vehicle occupant protection device higher than said first pressure,

said tether remaining intact in response to said first inflation fluid pressure in said inflatable vehicle occupant protection device,

said tether releasing in response to said second inflation fluid pressure in said inflatable vehicle occupant protection device.

2. The apparatus according to claim 1 wherein said inflation fluid source is a dual stage inflator having two separately actuatable igniters, and wherein a first one of said two separately actuatable igniters is activated in said first mode of operation to provide said first inflation fluid pressure in said inflatable vehicle occupant protection device and a both actuatable igniters are activated in said second mode of operation to provide said second inflation fluid pressure in said inflatable vehicle occupant protection device.

3. The apparatus according to claim 2 wherein said inflation fluid source includes vehicle electronic circuitry for delaying activation of said second one of said separately actuatable inflators after said first

one of said separately actuatable inflators is activated.

4. The apparatus according to claim 1 wherein said inflation fluid source includes a single stage inflator and a vent opening for venting a portion of said inflation fluid away from said inflatable vehicle occupant protection device.

5. The apparatus according to claim 4 wherein said inflation fluid source includes an actuatable door selectively movable from a first location adjacent said vent opening in which said vent opening is uncovered and a portion of said inflation fluid is vented away from said inflatable vehicle occupant protection device to a second location overlying said vent opening in which said vent opening is covered and said inflation fluid is blocked from venting away from said inflatable vehicle occupant protection device through said vent opening.

6. The apparatus according to claim 5 wherein said single stage inflator is activated and said vent opening is uncovered in said first mode of operation of

said inflation fluid source and said single stage inflator and said actuatable door are activated in said second mode of operation of said inflation fluid source.

7. The apparatus according to claim 6 wherein said inflation fluid source includes vehicle electronic circuitry for delaying activation of said actuatable door after the single stage inflator is activated.

8. The apparatus according to claim 5 wherein said first inflation pressure is provided by activation of said single stage inflator and simultaneously venting through said vent opening a portion of said inflation fluid away from said inflatable vehicle occupant protection device.

9. The apparatus according to claim 8 wherein said second inflation pressure is provided by blocking said inflation fluid generated by said first mode of operation of said inflation fluid source from venting through said vent opening away from said inflatable vehicle occupant protection device as a result of said actuatable door moving to said second location.

10. The apparatus according to claim 1 wherein said tether has a first length in said first mode of operation and a second length, longer than said first length, in said second mode of operation.

11. The apparatus according to claim 1 wherein said inflatable occupant protection device is made of fabric material and includes a back wall defining an opening into which said inflation fluid source partially extends and a front wall opposite the back wall, the front and back walls defining an interior chamber into which said inflation fluid flows.

12. The apparatus according to claim 10 wherein said tether comprises a piece of elongate fabric material having first and second opposite facing surfaces and first and second terminal ends.

13. The apparatus according to claim 12 wherein said first terminal end of said tether is fixed to said front wall and said second terminal end of said tether is fixed relative to said back wall.

14. The apparatus according to claim 13 wherein said tether includes at least one tear stitch which tears in response to said second inflation fluid pressure in said inflatable vehicle occupant protection device, and said tether releasing to lengthen from said first length to said second length in response to said tear stitch tearing.

15. The apparatus according to claim 14, wherein said tether lengthens to enable the shape of the inflated inflatable vehicle occupant protection device to change.

16. The apparatus according to claim 14 wherein said tear stitch is located on said tether.

17. The apparatus according to claim 14 wherein said tear stitch is located on a separate tear strap that is permanently sewn to said tether.

18. The apparatus according to claim 14 wherein said tether, when in said first length, includes a portion of said material gathered together and forming a loop and secured by said tear stitch.

19. The apparatus according to claim 14 wherein a plurality of tethers are coupled together with a single tear stitch so that the plurality of tethers lengthen in response to said single tear stitch tearing.